NO. 6502 P. 4

PATENT

7/24/03

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This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-7. (canceled)
- 8. (currently amended) An isolated protein, wherein (a) the protein comprises a sequence that has greater than 90% amino acid sequence identity to SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:10, or SEQ ID NO:12 as measured using a sequence comparison algorithm and wherein the protein algorithm, and (b) has microtubule stimulated ATPase activity.
- 9. (currently amended) An isolated protein of claim 8, wherein the protein specifically binds to polyclonal antibodies generated against a protein comprising SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:10, or SEQ ID NO:12.
- 10. (currently amended) An isolated protein of claim 8, wherein the protein comprises SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:10, or SEQ ID NO:12.
- 11. (original) An isolated protein comprising an amino acid sequence of SEQ ID NO:2.
- 12. (original) An isolated protein comprising an amino acid sequence of SEQ ID NO:4.
- 13. (original) An isolated protein comprising an amino acid sequence of SEQ ID NO:6.
- 14. (original) An isolated protein comprising an amino acid sequence of SEQ ID NO:8.

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- 15. (currently amended) An isolated protein comprising an amino acid sequence of SEQ ID NO:12 10.
 - 16. (canceled)
- 17. (currently amended) A method for screening a compound for antimalarial activity, which method comprises

contacting the compound with a protein, pretein comprising SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, or SEQ ID NO:12 wherein the protein (a) comprises a sequence that has greater than 90% amino acid sequence identity to SEO ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEO ID NO:10 as measured using a sequence comparison algorithm, and (b) has microtubule stimulated ATPase activity; and determining whether the compound binds to and inhibits the protein, any such binding and inhibition suggesting that the compound may have anti-malarial activity.

18. (original) A method of claim 17, wherein the screening occurs in a multiwell plate as part of a high-throughput screen.